

CLAIMS

What is claimed is:

- 1 1. A method for providing audio access to information through a
2 communication device, comprising the steps of:
3 receiving an audio request for information;
4 obtaining the information; and,
5 executing the obtained information.

- 1 2. The method of claim 1 wherein the communication device is a
2 cellular telephone.

- 1 3. The method of claim 1 wherein the communication device is a
2 standard telephone.

- 1 4. The method of claim 1 wherein the communication device is a
2 personal digital assistant.

- 1 5. The method of claim 1 further including the step of:
2 parsing the information subsequent to obtaining the information.

- 1 6. The method of claim 1 further including the step of:
2 generating an intermediary form of the information.

1 7. The method of claim 6 wherein the step of generating includes:
2 encoding an XML tag in the intermediary form; and,
3 encoding a tag state in the intermediary form.

1 8. The method of claim 6 wherein the step of generating includes:
2 generating an array representing the information.

1 9. The method of claim 1 wherein the information is stored in cache.

1 10. The method of claim 1 further including the step of:
2 determining whether the information is stored in a cache; and
3 wherein the step of obtaining obtains the information from cache.

1 11. The method of claim 10 wherein information stored in cache is
2 stored in an intermediary form.

1 12. The method of claim 1 further including the steps of:
2 parsing the information subsequent to the step of obtaining; and,
3 generating an intermediary form of the parsed information.

1 13. The method of claim 1 wherein the step of executing includes:
2 converting the information into audio;
3 and playing the audio.

1 14. The method of claim 1 wherein the step of executing includes:
2 returning an audio prompt.

1 15. A method for maintaining interpreter contexts during a voice
2 browsing session, comprising the steps of:
3 (a) creating a first interpreter context for a first document;
4 (b) storing the first interpreter context;
5 (c) receiving a request for a second document;
6 (d) obtaining the second document; and,
7 repeating steps (a) - (c).

1 16. The method of claim 15 wherein the first interpreter context
2 includes:
3 an instruction pointer;
4 a program pointer;
5 a universal Resource Identifier; and,
6 document state information.

1 17. The method of claim 15 further including the steps of:
2 determining whether an interpreter context exists for the second
3 document.

1 18. A voice browser comprising:
2 a reentrant interpreter maintaining separate contexts of information;
3 a parser, parsing the information; and,
4 a compiled document source object generating an intermediary from
5 of the parsed information.

1 19. The voice browser of claim 18 including a cache for storing the
2 intermediary form of the information.

1 20. An apparatus for responding to a Request during a voice browsing
2 session comprising:
3 a processor;
4 a processor readable storage medium in communication with the
5 processor, containing processor readable program code for programming
6 the apparatus to:
7 retrieve a first document responsive to the Request;
8 create an first interpreter context for the first document, wherein the
9 interpreter context includes a first interpreter context pointer value, a first
10 instruction pointer value, a first state value, and a first tag value;
11 set a current interpreter context pointer to the first interpreter context
12 value;
13 set a current instruction pointer to the first instruction pointer value;
14 set a current state to the first state value; and,

15 set a current tag to the first tag value.

1 21. The apparatus of claim 20 further including processor readable
2 program code for programming the apparatus to:
3 check the current state value;
4 process the first tag value responsive to the value of the current
5 state value.

1 22. The apparatus of claim 20 further including processor readable
2 program code for programming the apparatus to:
3 determine a Request for a second document;
4 set the current instruction pointer to a second instruction pointer
5 value; and,
6 determine whether the second document is in cache;
7 retrieve the second document.

1 23. The apparatus of claim 22 wherein the second document is not
2 located in cache the apparatus further including processor readable
3 program code for programming the apparatus to:
4 generate an intermediary form of the second document; and,
5 execute the intermediary form of the second document.

1 24. The apparatus of claim 23 further including processor readable
2 program code for programming the apparatus to:
3 store the intermediary form of the second document in cache.

1 25. The apparatus of claim 23 wherein execution includes playing audio
2 representing the second document.

1 26. An apparatus for generating an audio response during a voice
2 browsing session, comprising:
3 a voice browser; and,
4 a prompt audio object generating audio in response to a request.

1 27. The apparatus of claim 26 wherein the prompt audio object stores
2 a at least one prerecorded audio information.

1 28. The apparatus of claim 27 wherein the prerecorded audio
2 information is periodically updated.

1 29. The apparatus of claim 26 wherein the prerecorded audio
2 information includes tags identifying the information to the voice
3 browser.

1 30. The apparatus of claim 29 wherein the tag includes: location
2 information, context information, and device information.

- 1 31. A system for mapping prompts to prerecorded audio, comprising:
 - 2 an audio prompt database storing at least one prerecorded audio;
 - 3 code for generating a file identifying the least one prerecorded
 - 4 audio, wherein the file identifies the prerecorded audio using a unique
 - 5 identification; and,
 - 6 code for organizing the prerecorded audio file into contexts.